

HOW I DO IT

A New Guiding Device for Safer Introduction of the Blunt-Ended Stapler From the Anus in Low Anterior Anastomosis

SOTARO SADAHIRO, MD, MASAYA MUKAI, MD, TOMOO TAJIMA, MD,
TOSHIO MITOMI, MD, AND NOBUHIRO KAGAMINUMA

From the Department of Surgery, Tokai University School of Medicine, Kanagawa, Japan (S.S., M.M., T.T., T.M.); and Johnson & Johnson Medical K.K., Tokyo, Japan (N.K.)

In low anterior or anterior end-to-end anastomosis for rectal or left colon cancer, a blunt-ended circular stapler with the anvil detached, is introduced into the anus and passed up to the rectal stump. The sharp shoulders of the blunt end of the cartridge might damage the anal mucosa, the rectal valve, and rectal wall while being passed blindly from the anus to the rectal stump. There is a good possibility that any forceful overstretching of the anal sphincter for safe passage of the blunt-ended stapler may consequently cause anal incontinence for an extended period of time, which could be quite incapacitating for some patients.

We have developed a new guiding device to facilitate a safe passage of the blunt-ended circular stapler requiring no extra stretching of the anal sphincter.

The device, made of stainless steel, consists of a curved holder and a cap (Fig. 1), is 40 cm in length, and comes in two sizes according to the cap size, with maximum diameters of 29 mm and 33 mm. The cap, with its gradu-

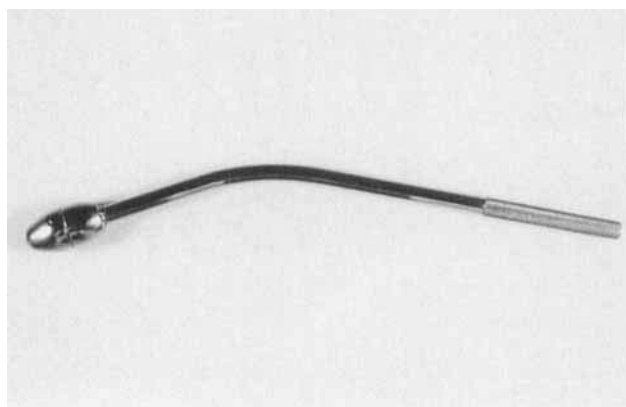


Fig. 1. The device has a curved holder and round cap.

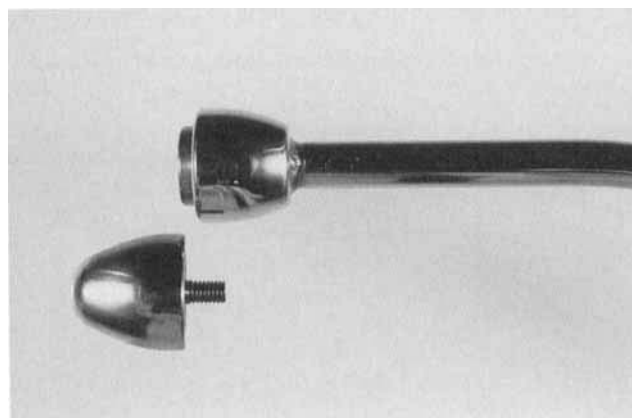


Fig. 2. The cap comes off when it is unscrewed. The section of the holder connects precisely with the section of the circular stapler without anvil.

ally tapering shape, comes off when it is unscrewed, and the blunt end of the holder appears, ready to be fitted face-to-face with the blunt-ended stapler (ILS, Endopath-ILS) (Fig. 2).

After resection of the rectum, the anorectum is checked digitally. No effort is made to stretch the anal sphincter at this time. The well-lubricated device is introduced into the proximal end of the rectal stump, which is held at three points with Allis or Babcock forceps and slowly advanced until the cap projects from the anus (Fig. 3). (Since the cap of the device is rounded and has no sharp

Accepted for publication March 14, 1996.

Address reprint requests to Dr. Sotaro Sadahiro, Department of Surgery, Tokai University School of Medicine, Bohseidai, Isehara, Kanagawa 259-11, Japan.

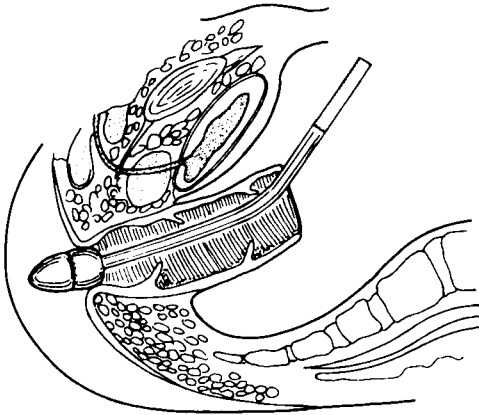


Fig. 3. The device is inserted into the rectal stump and is advanced until the cap protrudes from the anus.

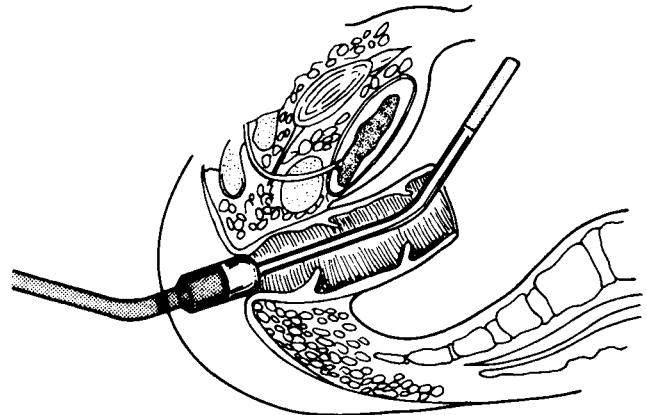


Fig. 5. The sections of the device and the circular stapler without anvil are connected.

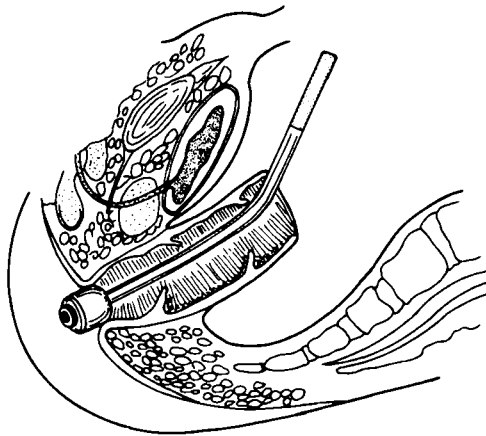


Fig. 4. The cap is unscrewed and removed.

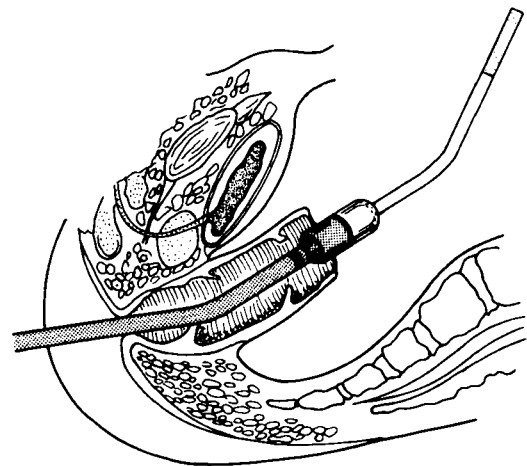


Fig. 6. The assembly—the device and stapler—is guided toward the rectal stump from the anus.

end, insertion and passage should be quite easy and safe.) The cap is unscrewed and removed (Fig. 4). The blunt end of the stapler, with the anvil detached, is pressed against the blunt end of the device (Fig. 5). The assembly, the device connecting with the stapler, is passed up along the rectal stump as the stapler is pushed and the device is pulled (Fig. 6).

We have used the new device routinely for the past 10 months in 50 cases and are quite satisfied with its safety and ease of handling.